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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/747,949	12/31/2003	Seok Hwa Jeong	0465-1116P	6947

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EXAMINER
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ALVESTEFFER, STEPHEN D

ART UNIT	PAPER NUMBER
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2175

NOTIFICATION DATE	DELIVERY MODE
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07/22/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/747,949	<b>Applicant(s)</b> JEONG, SEOK HWA	
	<b>Examiner</b> Stephen Alvesteffer	<b>Art Unit</b> 2175	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 7-12, 14-22, 26-39 and 44-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-12, 14-22, 26-39 and 44-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20100223, 20100318</u> .                                      | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Amendment*

This Office Action is responsive to the Amendment filed May 6, 2010. Claims 1, 2, 11, 21, 22, 30, and 46 are amended. Claims 4-6, 13, 23-25, 40-43, and 47-49 are previously cancelled. Claims 1-3, 7-12, 14-22, 26-39, and 44-46 remain pending.

The Information Disclosure Statements (IDS) filed February 23, 2010 and March 18, 2010 have been considered by the examiner.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 2, 11, 21, 22, 30, and 46 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

**As amended, claim 1** recites in part, "*activating an advance screen saver warning before activating a screen saver if the current system idle time **is different** than a time difference between the screen saver standby time and the advance screen saver warning time*" (emphasis added). The instant specification teaches that the screen saver warning is activated if the current system idle time **is greater than or equal to a**

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time difference between the screen saver standby time and the advance screen saver warning time (Instant Specification publication paragraph [0012]). In the case where the current system idle time **is less than** a time difference between the screen saver standby time and the advance screen saver warning time, the instant specification states that *"the controller 430 performs normal video display as it was done in step S510"* (Instant specification publication paragraph [0035]), that is, the screen saver warning is not activated. Furthermore, it would not make sense to activate the advance screen saver warning if the current system idle time is merely **different** than a time difference between the screen saver standby time and the advance screen saver warning time. In this case, the screen saver warning would always be activated except for the brief moment in which the current system idle time is **equal to** the time difference. This behavior is illogical and not disclosed in the instant disclosure.

**A similar problem exists for claims 2 and 11** in which the claim recites that the advance screen saver warning is deactivated and the screen saver is activated continuously except for the brief moment in which the current system idle time is **equal to** the screen saver standby time. Claims 2 and exacerbate the logic problem of claim 1, resulting in a method that requires the screen saver warning to at almost all times be both activated and deactivated and the screen saver to at almost all times be activated.

**Claims 21, 22, and 30** recite a display apparatus having substantially the same limitations as the method of claims 1, 2, and 11, respectively. Therefore, the claims are rejected under the same rationale.

**Claim 46** recites a method having substantially the same limitations as the method of claim 1. Therefore, claim 46 is rejected under the same rationale.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 7, 9-12, 14-22, 26, 28-37, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanyo Multimedia Projector PLV-70 Owner's Manual (hereinafter Sanyo) and Hung-yi, United States Patent Application Publication 2003/0191960. The Sanyo reference was retrieved from [http://www.projectorcentral.com/pdf/projector\\_manual\\_1730.pdf](http://www.projectorcentral.com/pdf/projector_manual_1730.pdf), published to the public on or before August 2002 according to the "First Ship" date found on the product data page at <http://www.projectorcentral.com/Sanyo-PLV-70.htm?print=1>.

**Regarding claim 1**, Sanyo substantially teaches a method of providing an advance screen saver warning for a display apparatus, the method comprising:

predetermining a screen saver standby time and an advance screen saver warning time (see Sanyo page 37 "Power management"; the advance screen saver warning time is set to 5 minutes and the screen saver standby time can be the same as the advance screen saver warning time);

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counting a current system idle time during which no system input activity is detected (see Sanyo page 37 "Power management"; *"This function turns Projection Lamp off when this projector detects signal interruption and is not used for a certain period"*, the apparatus of Sanyo counts the time in which the projector is not used, which is equivalent to counting a current system idle time);

activating an advance screen saver warning before activating a screen saver if the current system idle time is different than a time difference between the screen saver standby time and the advance screen saver warning time (see Sanyo page 37 "Power management"; in Sanyo, the advance screen saver warning is activated immediately upon interruption of the input signal. Immediately after the screen saver warning is activated, the current system idle time becomes different than the time difference between the power down time and the power down warning time, which is 0:00); and

continuously displaying the activated advance screen saver warning by the display apparatus until system activity by a user of the system is detected (see Sanyo page 37 "Power management"; *"No signal" and counting down display appears (for 5 minutes)"*);

deactivating the advance screen saver warning so that it is no longer displayed, wherein the screen saver is activated only if the advance screen saver warning time is completed (see Sanyo page 37 "Power management"; *"Power Management function operates to turn Projection Lamp off when input signal is interrupted and any button is not pressed over 5 minutes... Projection Lamp is automatically turned on when input*

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*signal connected or projector is operated with any button on Top Control or on Remote Control Unit again”); and*

controlling, during the continuous execution of the advance screen saver warning, the display apparatus to output at least one of a specified sound and a visual warning message window indicative of a time difference between the screen saver standby time and current system idle time (see Sanyo page 37, “No signal 4:50” figure on bottom right corner).

Sanyo does not teach a screen saver. However, a screen saver is functionally equivalent to turning the projection lamp off as in Sanyo. Both are methods of preserving the life of the display equipment when not in use, and are often used interchangeably or in combination. Hung-yi discloses a similar invention in which a warning countdown is displayed on screen prior to the computer starting a screen saver to keep the computer locked in wait (see Hung-yi paragraph [0010]; “*within five minutes before the time of using the computer running out, said main program thereof will send out a warning signal and sound to remind the user of the time-limit. Or, there may be less than five minutes left for using the computer when the user first enters the computer. In either case, when the pre-set using time is up, said main program thereof will automatically start said screen saver to keep the computer locked in wait*”). It would have been obvious to one having ordinary skill in the art having the references of Sanyo and Hung-yi laid before him at the time the invention was made, to provide an advance warning countdown that a screensaver or other screen preservation technique will soon go into effect.

**Regarding claim 2**, Sanyo/Hung-yi teaches deactivating the advance screen saver warning and activating the screen saver if the current system idle time is different than the screen saver standby time (see Sanyo page 37 “Power management”; “*This function turns Projection Lamp off when this projector detects signal interruption and is not used for a certain period*”, immediately prior to and immediately after power-down, the current system idle time is different from the power down standby time).

**Regarding claim 3**, Sanyo/Hung-yi teaches that the deactivating the advance screen saver warning and the activating the screen saver are performed simultaneously (see Sanyo page 37 “Power management”; “*This function turns Projection Lamp off when this projector detects signal interruption and is not used for a certain period*”).

**Regarding claim 7**, Sanyo/Hung-yi teaches that the visual warning message window includes at least one of a textual representation and a graphical representation indicating the remaining time (see Sanyo page 37, “No signal 4:50” figure on bottom right corner).

**Regarding claim 9**, Sanyo/Hung-yi teaches that the visual warning message window is displayed on a predetermined screen portion of the display screen, which is automatically determined by default or is manually determined by an operator (see Sanyo page 37, “No signal 4:50” figure on bottom right corner).

**Regarding claim 10**, Sanyo/Hung-yi teaches undisplaying the visual warning message window from the display screen if any system input activity is detected (see Sanyo page 37 “Power management”; “*Power Management function operates to turn*



*Projection Lamp off when input signal is interrupted and any button is not pressed over 5 minutes”).*

**Regarding claim 11**, Sanyo/Hung-yi teaches undisplaying the visual warning message window and activating the screen saver if the current system idle time is different than the screen saver standby time (see Sanyo page 37 “Power management”; *“Power Management function operates to turn Projection Lamp off when input signal is interrupted and any button is not pressed over 5 minutes”*, immediately prior to and immediately after the power down event, the current system idle time is different from the power down standby time).

**Regarding claim 12**, Sanyo/Hung-yi teaches that the visual warning message window is an on-screen-display (OSD) window (see Sanyo page 37, “No signal 4:50” figure on bottom right corner).

**Regarding claim 14**, Sanyo/Hung-yi teaches that the specified sound is any one of a computer-generated sound and a human voice indicating a time until the screen saver is activated (see Hung-yi paragraph [0010]; *“said main program thereof will send out a warning signal and sound to remind the user of the time-limit”*).

**Regarding claim 15**, Sanyo/Hung-yi teaches that the screen saver standby time is a total length of system idle time that must elapse before activating the screen saver (see Sanyo page 37 “Power management”; *“This function turns Projection Lamp off when this projector detects signal interruption and is not used for a certain period”*).

**Regarding claim 16**, Sanyo/Hung-yi teaches that the advance screen saver warning time is a length of time during which the advance screen saver warning is

continuously activated before activating the screen saver (see Sanyo page 37 “Power management”; “*No signal and counting down display appears (for 5 minutes)*”).

**Regarding claim 17**, Sanyo/Hung-yi teaches that the screen saver standby time is predetermined to an automatically assigned default value or a manually selected value (see Sanyo page 37 “Power management”; “*Power Management function operates to turn Projection Lamp off when input signal is interrupted and any button is not pressed over 5 minutes*”).

**Regarding claim 18**, Sanyo/Hung-yi teaches that the advance screen saver warning time is predetermined to an automatically assigned default value or a manually selected value (see Sanyo page 37 “Power management”; “*Power Management function operates to turn Projection Lamp off when input signal is interrupted and any button is not pressed over 5 minutes*”).

**Regarding claim 19**, Sanyo/Hung-yi teaches that the system input activity includes at least one of a horizontal synchronization signal, a vertical synchronization signal, and a manual user input (see Sanyo page 37 “Power management”; “*Power Management function operates to turn Projection Lamp off when input signal is interrupted and any button is not pressed over 5 minutes*”).

**Regarding claim 20**, Sanyo/Hung-yi teaches that the manual user input is made by a user through a keyboard or mouse (see Sanyo page 37 “Power management”; “*Power Management function operates to turn Projection Lamp off when input signal is interrupted and any button is not pressed over 5 minutes*”; see also Hung-yi claim 4;

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*“said main program thereof loaded on a main computer can lock the keyboards and mouse connected to the computers on the workstation”).*

**Claims 21, 22, 26, 28-37** recite a display apparatus having substantially the same limitations as the method of claims 1, 3, 7, 9-12, 20, 14-16, 19, and 20.

Therefore, the claims are rejected under the same rationale.

**Claim 46** recites a method having substantially the same limitations as the method of claim 11. Therefore, claim 46 is rejected under the same rationale.

Claims 8, 27, 38, 39, 44, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanyo (Non-patent) *supra*, Hung-yi (2003/0191960) *supra*, and Pollack, United States Patent 5,153,580.

**Regarding claim 8**, Sanyo/Hung-yi teaches every limitation of claim 8 except that the graphical representation included in the warning message window is any one of a bar-type graph, a clock-type graph with a moving indicator, and a pie-type graph. Pollack teaches a retriggerable sleep timer display having a bar graph display indicating the time remaining until the display turns off (see Pollack Figure 5 and column 6 line 63 through column 7 line 20; *“In FIG. 5, a bar graph 520 is displayed along with the video on a screen 510 of a television receiver 500. The bar may be indicative of time remaining until turn off”*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a graphical indication of the remaining time as taught by Pollack with the invention of Sanyo/Hung-yi in order to provide users with a visual warning of a disruptive event such as the screen saver coming on.

**Claim 27** recite a display apparatus having substantially the same limitations as the method of claims 8 respectively. Therefore, the claims are rejected under the same rationale.

**Regarding claim 38**, Sanyo/Hung-yi/Pollack teaches a memory coupled to the controller for storing the predetermined screen saver standby time and advance screen saver warning time (see Pollack column 2 line 53 through column 3 line 9; *"Microcomputer 110 includes program memory (ROM) 112, and stores channel-related data in a random-access memory (RAM) 120. RAM 120 may be either internal to, or external to, microprocessor 110, and may be of either the volatile or non-volatile type. The term "RAM" is also intended to include electrically-erasable programmable read only memory (EEPROM). One skilled in the art will recognize that if volatile memory is utilized, that it may be desirable to use a suitable form of standby power to preserve its contents when the receiver is turned off"*).

**Regarding claim 39**, Sanyo/Hung-yi/Pollack teaches that the memory is an Electrically Erasable Programmable Read-only Memory (EEPROM) (see Pollack column 2 line 53 through column 3 line 9; *"The term "RAM" is also intended to include electrically-erasable programmable read only memory (EEPROM)"*).

**Regarding claim 44**, Sanyo/Hung-yi/Pollack teaches that the predetermined screen saver standby time and advance screen saver warning time are manually set by a user of the display apparatus (see Pollack column 1 lines 16-25; *"Many modern television receivers include a so-called sleep timer function for automatically turning the receiver off after a predetermined time interval set by a user"*).

**Claim 45** recites a display apparatus with substantially the same limitations as the method of claim 44. Therefore, claim 45 is rejected under the same rationale.

### ***Response to Arguments***

Applicant has amended the claims so they recite that the advance screen saver warning is activated if the system idle time is different from a time difference between the screen saver standby time and the advance screen saver warning time. However, as noted in the 35 USC 112 rejection above, this is both illogical and unsupported in the instant disclosure.

Even if the amendments were found to be supported in the disclosure, the previously cited prior art references still read upon the claims. In Sanyo, the time difference between the lamp turnoff time and the advance lamp turnoff warning time is 0:00 (no difference). The advance lamp turnoff warning timer is activated the instant the idle timer is begun. However, immediately after that instant, the current system idle time becomes different from 0:00 (for example, 0:01). In practice, this difference between the claimed invention and the cited prior art is negligible and therefore does not patently distinguish the instant claims from the prior art.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Kutosky (US 5,442,600) Snooze-timer device

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Alvesteffer whose telephone number is (571)270-1295. The examiner can normally be reached on Monday-Friday 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Bashore can be reached on (571)272-4088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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